

REGULATION III - CONTROL OF AIR CONTAMINANTS

RULE 333 PETROLEUM SOLVENT DRY CLEANING

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**MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS**

REGULATION III - CONTROL OF AIR CONTAMINANTS

**RULE 333
PETROLEUM SOLVENT DRY CLEANING**

SECTION 100 - GENERAL

- 101 PURPOSE:** To limit the emissions of volatile organic compounds from petroleum solvents used in dry cleaning.
- 102 APPLICABILITY:** This rule applies to petroleum solvent washers, dryers, solvent filters, settling tanks, vacuum stills, and other containers and conveyors of petroleum solvent that are used in petroleum solvent dry cleaning facilities.

SECTION 200 - DEFINITIONS: For the purpose of this rule, the following definitions shall apply:

- 201 CARTRIDGE FILTER** - Any perforated canister containing filtration paper, fabric and/or activated carbon that is used in a pressurized system to remove solid particles and fugitive dyes from soil-laden solvent.
- 202 CONTAINERS AND CONVEYORS OF SOLVENT** - Any piping, ductwork, pumps, storage tanks, and other ancillary equipment that are associated with the installation and operation of washers, dryers, filters, stills and settling tanks.
- 203 DRY CLEANING** - A process for the cleaning of textiles and fabric products in which articles are washed in nonaqueous solvent and then dried by exposure to a heated air stream.
- 204 PERCEPTIBLE LEAKS** - Any petroleum solvent vapor, mist, or liquid leaks that are conspicuous from visual observation, such as pools or droplets of liquid, or buckets or barrels of solvent or solvent-laden waste standing open to the atmosphere.
- 205 PETROLEUM SOLVENT** - Volatile organic compounds commonly produced by petroleum distillation, primarily comprising a hydrocarbon range of 8 to 12 carbon atoms per organic molecule.

- 206 SOLVENT RECOVERY DRYER** - A class of dry cleaning dryers that employs a condenser to liquefy and recover solvent vapors evaporating in a closed-loop, recirculating stream of heated air.
- 207 VOLATILE ORGANIC COMPOUND (VOC)** - Any organic compound, excluding the following organic compounds which have been designated by the EPA as having negligible photochemical reactivity: methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane; trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (CFC-22); 1,1,2-trichlorotrifluoroethane (CFC-113); 1,2-dichlorotetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); trifluoromethane (FC-23); 2,2-dichloro-1,1,1-trifluoroethane (HCFC-123); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); 1,1-dichloro-1-fluoroethane (HCFC-141b); 1-chloro-1,1-difluoroethane (HCFC-142b); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); all completely fluorinated, completely saturated: alkanes, ethers and tertiary amines.

SECTION 300 - STANDARDS

- 301 OPERATING REQUIREMENTS** - A person shall not operate any petroleum solvent dry cleaning facility unless all of the following requirements are satisfied:
- 301.1 Liquid and Vapor Leaks:** Dry cleaning equipment shall not be operated with perceptible leaks from any portion of the equipment, including but not limited to: hose connections, unions, couplings and valves; machine door gaskets and seating; filter head gaskets and seating; pumps; base tanks and storage containers; water separators; filter sludge recovery; distillation units; diverter valves; solvent-moistened lint from lint basket; and cartridge filters.
- 301.2 Solvent Storage:** Solvents shall be stored in closed containers.
- 301.3 Access Vents:** All washer and dryer traps, access doors, and any other parts of equipment where solvent may be exposed to the atmosphere, shall be kept closed at all times except when required for proper operation or maintenance.
- 301.4 Solvent Filtration:** Any petroleum filtration system shall be installed and operated to comply with at least one of the following:
- a. Reduce the volatile organic compounds in all filtration wastes to 2.2 lbs (1 kg) or less per 220 lbs (100 kg) dry weight of articles cleaned, before disposal, and exposure to the atmosphere; or

- b. Install and operate a cartridge filtration system, and drain the filter cartridges in their sealed housings for eight hours or more before their removal; or
- c. Place all discarded filtration material, including cartridges and particulate filter media, immediately in sealed containers and dispose of according to hazardous waste statutes.

302 CONTROLS REQUIRED - SOLVENT RECOVERY DRYER: Petroleum solvent dry cleaning facilities installed after July 13, 1988, shall have a solvent recovery that recovers at least 85 percent of petroleum solvent by weight. In addition, the recovery cycle for the dryer shall not be terminated until the petroleum solvent flow rate from the water separator is 15 milliliters or less per minute.

SECTION 500 - MONITORING AND RECORDS

501 RECORDKEEPING AND REPORTING: Any person subject to this rule shall comply with the following requirements. Records shall be retained for five years and shall be made available to the Control Officer upon request.

501.1 Current List: Maintain a current list of solvents and any other VOC-containing materials; state the VOC content of each in pounds per gallons or grams per liter.

501.2 Usage Records and Amount of Clothes Cleaned: Maintain monthly records of the weight of clothing cleaned, the amount of solvent-used, and the weight and type of any material disposed of which contains any quantity of cleaning solvent. The name of the company receiving such material shall also be recorded.

502 COMPLIANCE DETERMINATION - TEST METHODS: When more than one test method is permitted for a determination, an exceedance of the limits established in the rule determined by any of the applicable test methods constitutes a violation of this rule.

502.1 Measurements of petroleum-based VOC emissions pursuant to provisions of this rule shall be conducted in accordance with EPA Test Method 25 or its applicable submethod(s) (40 CFR 60, Appendix A). Alternatively, a person may meet the efficiency (85 percent) requirement of Section 302 if 6.6 lbs (3 kg) or less of petroleum solvent is emitted per 220 lbs (100 kg) dry weight of articles cleaned, subject to prior approval of the test protocol by the Control Officer.

502.2 Measurements of VOC content of solvents, waste, recovered or recycled material shall be conducted and reported in accordance with ASTM Standard

Recommended Practices for General Gas Chromatography Procedures, E 260-85 or ASTM General Techniques For Infrared Quantitative Analysis, E 160A-67 or ASTM General Techniques of Ultraviolet Quantitative Analysis, ASTM E 169-63; as approved by the Control Officer.

- 502.3** Efficiency of the control device shall be determined according to EPA Method 18.
- 502.4** Ventilation/draft rate shall be determined by EPA Methods 2, 2A, 2C and 2D.